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January 30, 2018

City of Rockville
Department of Public Works
111 Maryland Avenue
Rockville, MD 20850-2364

Attention: Mr. Rob Orndorff, Horticulturalist

Subject: King Farm Farmstead Water and Sewer Master Plan Update
Environmental Engineering, Contract No. 12-12, Category N

Dear Mr. Orndorff:

In accordance with your purchase order for engineering and design services, KCI Technologies, Inc. (KCI) is pleased to submit the updated cost estimates to amend the report titled *Phase I Letter Report for the Site Utility Water and Sewer System for the King Farm Farmstead, Revision 1, dated January 8, 2008* (the "Report"). Included in this amendment are the revisions to the following documents:

- Attachment 2, MTO and Construction Cost Estimates, Table 1-5
- Attachment 3, WSSC Charges, Tables 1 & 2

The revisions to the Attachments 2 and 3 are based on the final water and sewer improvements plans dated May 13, 2009 and include updates to the quantities and bid items.

Based on available cost indexes, KCI found that the average construction cost has increased approximately 20% from 2008 to present. This factor, along with research on current bid tabs, manufacturer prices and WSSC fee and inspection listings, became the basis for the overall price increase. As a result, the total project cost increased 25.5% to \$565,304 from the original project cost of \$450,311 as presented in the Report.

We appreciate the opportunity to continue to provide engineering services to the City of Rockville. Please feel free to contact me with any questions or concerns.

Respectfully,

Timothy W. Wolfe, P.E., BCEE
Vice President
Environmental Discipline

Mr. Wolfe's Direct Dial Number: 410-316-7849
Fax Number: 410-316-7935

Enclosures: Attachment 2, MTO and Construction Cost Estimates, & Attachment 3, WSSC Charges

Attachment 2

MTO and Construction Cost Estimate

Table 1: Farmstead Park Water

Table 2: Farmstead Park Sewer

Table 3: The Manse Water

Table 4: The Manse Sewer

Table 5: Summary Construction Cost

Table 1: Farmstead Park Water

Item	Description	Unit	Quantity	Unit Price	Total Price
1	Water service 8" DIP	LF	232	160	\$ 37,120
2	Water service 6" DIP	LF	278	140	\$ 38,920
3	Water service 2" Type K copper	LF	192	80	\$ 15,360
4	8" Gate Valve & box	each	1	3530	\$ 3,530
5	6" Gate Valve & box	each	4	2600	\$ 10,400
6	2" Corporation cock	each	4	500	\$ 2,000
7	Fire Hydrant	each	1	5000	\$ 5,000
8	6" FM Meter and Meter Vault	each	1	16300	\$ 16,300
9	8" x 8" Tee DIP	each	1	990	\$ 990
10	8" x 6" FH Tee DIP	each	1	910	\$ 910
11	8" x 6" Reducer DIP	each	1	710	\$ 710
12	6" x 2" Cap Tap DIP	each	1	580	\$ 580
13	6" x 6" Tee DIP	each	3	750	\$ 2,250
14	2" 90 Ell DIP	each	1	305	\$ 305
15	Pavement and sidewalk restoration	SY	10	150	\$ 1,500
Total					\$ 135,875

Table 2: Farmstead Park Sewer

Item	Description	Unit	Quantity	Unit Price	Total Price
1	8" PVC sewer	LF	699	135	\$ 94,365
2	6" PVC sewer	LF	91	115	\$ 10,465
3	4" PVC sewer	LF	124	100	\$ 12,400
4	6" PVC Cleanout	each	2	350	\$ 700
5	4" PVC Cleanout	each	5	310	\$ 1,550
6	Connect to WSSC MH	each	1	1000	\$ 1,000
7	Manhole Standard	each	5	4700	\$ 23,500
8	Pavement and sidewalk restoration	SY	10	150	\$ 1,500
Total					\$ 145,480

Table 3: The Manse Water

Item	Description	Unit	Quantity	Unit Price	Total Price
1	Water service 1-1/2" Type K copper	LF	234	80	\$ 18,720
2	Corporation cock 1-1/2"	each	1	450	\$ 450
Total					\$ 19,170

Table 4: The Manse Sewer

Item	Description	Unit	Quantity	Unit Price	Total Price
1	4" PVC sewer	LF	256	100	\$ 25,600
2	4" PVC Cleanout	each	2	310	\$ 620
3	Connect to WSSC sewer	each	1	1000	\$ 1,000
Total					\$ 27,220

Table 5: Summary Construction Cost

Farmstead Park Water		\$ 135,875
Farmstead Park Sewer		\$ 145,480
The Manse Water		\$ 19,170
The Manse Sewer		\$ 27,220
Soil Erosion and Sediment Control	LS	\$ 6,000
Subtotal		\$ 333,745
Contingency	25%	\$ 83,436
Total Construction Cost		\$ 417,181
WSSC Charges		\$ 148,123
Project cost		\$ 565,304

Attachment 3

WSSC Charges

Table 1: Farmstead Park Charges

Table 2: The Manse Charges

Table 1: WSSC System Development Charges Farmstead Park¹

Units	Fixture Description	Water Supply FU	SDC Water Charge	Drainage FU	SDC Sewer Charge	SDC Combined Charge
49	Water Closet (assume flush valve)	245	\$ 21,560.00	294	\$33,810.00	\$55,370.00
9	Urinal	27	\$ 2,376.00	36	\$4,140.00	\$6,516.00
29	Lavatory	29	\$ 2,552.00	29	\$3,335.00	\$5,887.00
10	Drinking Fountain	2.5	\$ 220.00	5	\$580.00	\$800.00
9	Utility Sink	18	\$ 1,584.00	18	\$2,070.00	\$3,654.00
11	Hose Bibb	33	\$ 2,904.00	0	N/A	\$2,904.00
Subtotal System Development		354.5	\$31,196.00	382	\$43,935.00	\$75,131.00
Application and Inspection Fee for Applicant Installed Service Connections						\$2,178.00
Standard Service Connection in Public Way, Outside Meter (6")						\$31,300.00
Standard Service Connection in Public Way, 8" into existing Manhole						\$13,500.00
Non-residential review/inspection fees						
Water Hookup					\$ 170.00	
Sewer Hookup					\$ 170.00	
First Plumbing Fixture					\$ 170.00	
Additional Fixtures (116)					\$ 5,104.00	
Long Form Permit Charge					\$ 253.00	
Site Utility Review Water (702 LF)					\$ 5,717.00	
Site Utility Review Sewer (914 LF)					\$ 6,321.00	
Subtotal Review/Inspection Fees						\$ 17,905.00
Total Nonresidential System Development, Connection and Review Charges						\$ 140,014.00

¹ Source: [Appendix B 2013 WSSC Plumbing and Fuel Gas Code; Development Services - Project Fees](#)

Table 2: WSSC Charges for the Manse

Water		
	1-1/2 inch	\$375.00
Sewer		
	4 & 6 inch	\$500.00
Inspection Fees		
	Converting from well	\$198.00
	Sewer/septic hookup	\$99.00
System Development Charges		
	Housing w/ 3 - 4 toilets	\$5,090.00
	Connection abandonment county road - Sewer	\$1,847.00
Front Foot Benefit Assessment		unknown
Subtotal residential		\$8,109.00
Total WSSC Charges		\$148,123.00